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Patent Claims

- an advancing movement 1. A method for carrying out the support least tool one symmetric component, and 5 rotationally - being which is capable of being fed in each case via a leadscrew, and vettably divable is supported on the component and is driven in rotation as a whole by a stationarily mounted main motor via a main transmission mechanism connected to the support of the tool rest or 10 the advancing movement the of each (leadscrew being brought about in each case by the relative movement of a further motor-driven transmission cooperating with the leadscrew. addition to the main transmission mechanism, and 15 the relative movement generated by the drive in motor mounted at and driving ther transmission location further mechanism, characterized that the rest motor, is 20 synchronously driven in rotation as a whole, by the main motor with the aid of a mechanical coupling kest and main motors tre SUPPORT
- 2. The method as claimed in claim 1, characterized in that each rest motor is braked in the event of a feed of zero.
- 3. device for a working machine for the /arotationally surface of machining symmetric COMP(15118: 30 and with a main transmission mechanism; receiving transmitting the drive movement from Indrive increment from least one tool rest to "at the wain which transmissica rotates about the component; (1) and is capable of mechanism at least one leadscrew (5) and which 35 and of[∄]a rest mounting (3) Support+

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tu support;

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the component (1), each leadscrew (5)

PCT/DE00/01980, for supporting at least the at least one fundamen; and 1999P04110WO

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(being capable of being driven transmission mechanism and the latter by a fixed Supportest motor, (13) characterized in

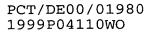
of the rest motor (13) is mounted rotatably and is coupled mechanically to the main motor, (8) and is being thus capable of being driven synchronously in

rotation by the latter. L main not

further transmission mechanism for diving at least the at least me Dad sciew, 4.

as claimed device in claim 3, The, Whenacterized in that the main transmission mechanism is an externally toothed gear ring (6) driven by a pinion-(7) seated on the motor shaft of the main motor +(8).

- 15 feed device as claimed in claim 3 or 4, 5. characterized in that the main transmission mechanism is an externally toothed gear ring driven by the motor shaft of the main motor via a toothed belt.
- 20 claim 3, wherein The feed device as claimed in one of claims 6. 5, characterized in that the further transmission mechanism is an externally and internally toothed gear ring (12) driven by a pinion (11) seated on the motor shaft of the rest motor (13). 25 SUPPORT alain 3, wherein
- The feed device as claimed in one of claims 3 to -6, characterized in that the further transmission mechanism is an externally and internally toothed 30 gear ring driven by the motor shaft of the rest motor via a toothed belt.



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claim 3, wherein the - 11 -

- The feed device as claimed in one of claims 3 to 8. 7, characterized in that each rest motor (13) equipped with a slip ring set (15) for transmission of power to its windings
- The feed device as claimed in one of claims 3 to 9. 8; characterized in that the further transmission mechanism is mounted rotatably on a support (10) of the main motor (8).
- 10 The feed device as claimed in one of claims 3 to 8, characterized in that the further transmission mounted rotatably on the rest Support mechanism is mounting (3) of the tool rest (4). SUPPORT
 - claim 3, wherein The feed device as claimed in one of claims 3 to 10, characterized in that the main motor (8) is coupled mechanically to the housing of the rest survivi motor or rest motors (13) via toothed belts (14).
- 20 The feed device as claimed in one of claims 3 to 10, characterized in that the main motor coupled mechanically to the housing of the rest support motor or rest motors via gearwheel mechanisms.
- 25 claim 3, wherein The feed device as claimed in one of claims 3 to 12, characterized in that the rest motor (13) is a SUPPOTT brake motor.

sace as 13, depoting on 4 20. sace as 12, depoting on 14. 11 5 15 16. 10

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same as 6, dependy on 4 18 117 11 " 5 19

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Reference symbols

- 1 Shaf/t
- 2 Bearing
- 3 Frame support
- 4 Tobl rest
- 5 Leadscrew
- 6 Ring gear
- 7 Pinion
- 8 Main motor
- 9 ‡001
- 10 Support
- 11 Pinion
- 12 Ring gear
- 13 Rest motor
- 14 Toothed belt
- 15 Slip rings
- 17 Pinion